

- Nucula proxima*. Common.
Arca incongrua Say. Common.
Arca transversa Say. Common.
Arca pexata Say. Common.
Arca americana Gray. Common.
Arca ponderosa Say. Common.
Pectunculus sp.? Single valve.
Mytilus exustus L. Common.
Mytilus hamatus Say. Common.
Modiola tulipa L. A few small specimens.
Modiola plicatula Lam. Common.
Modiola lignea Reeve. Two specimens attached to Gorgonia.
Dreissensia leucophaea Conr. Common in brackish water.
Lithophagus appendiculata L. Common burrowing into Coquina.
Aricula atlantica Lam. Three specimens.
Aricula radiata Lam. One specimen attached to floating seaweed.
Pinna seminuda Lam. Common.
Pinna muricata L. Common.
Plicatula ramosa Lam. A few young specimens attached to coral.
Lima tenera Chemn. One living specimen.
Pecten dislocata Say. Living examples are rarely found.
Anomia ephippium L. Common.
Ostrea virginica Gmel.
Ostrea equestris Say.
Ostrea frons L. One specimen attached to Gorgonia.
Glottidia antillarum var. *pyramidata* Stimp (*Lingula*). A specimen taken near the old light-house is in a private collection.

WHY DOES PROPHYSAON SHED ITS TAIL?

BY W. J. RAYMOND.

While reading the March "Nautilus" my attention was directed to the foot-note on page 126, in which is related Mr. Hemphill's extraordinary experience with a specimen of Prophysaon. I have twice had a similar experience while handling living animals of the same genus, and think it may be of interest to record my observations.

In August, 1888, I collected on one occasion about a dozen examples of *Prophysaon andersoni* J. G. Cp., near the San José reservoir, above Lexington, Santa Clara County. While taking measurements of the living specimens, before putting them into alcohol, I noticed in several a contraction about two-thirds of the length from the head. This appeared as an indented line completely encircling the body. Upon handling the slugs to examine this phenomenon more closely, the line became deeper and in the case of two of the specimens the tail dropped off, almost as readily as the ray of the so-called "brittle" starfish. Only with mature slugs did this happen. The young, constituting the majority of those captured, showed no signs of shedding their tails. Perhaps they had further use for them. The discarded appendages showed vitality for a short time only, when they went to join their owners in my collecting bottle.

Again, only a few weeks ago, I collected on the northern boundary of Oakland some *Prophysaon hemphilli* Bl. & Binn. which together with *Ariolimax Californicus* and one of our smaller species of *Ariolimax*, inhabit a marshy spot near the Bay shore. At home the next day when taking my captives out of the can into which they had been put, I noticed the same contraction taking place in the specimens of *Prophysaon*, but in no case did it proceed to dismemberment. I put them into alcohol and in every one of them, seven in all, there is a well-marked, depressed line about the body near the tail, the body being attenuated behind the constriction, the whole looking very much as a soft iron wire looks just before it breaks under a tensile strain. In the largest specimen which measures 34 mm. contracted in alcohol, the depressed line is 8 mm. from the tail and is marked across the foot by a black line, as if the tissues were already almost severed. When collected there was no constriction visible.

In no other case have I observed this dropping of the tail among slugs, which seems as far as recorded to be confined to species of the genus *Prophysaon*. Here are the facts; who can explain them?

NOTES ON SOME NORTH AMERICAN PUPIDÆ WITH DESCRIPTIONS
OF NEW SPECIES.

BY DR. V. STERKI.

On my request, Mr. H. Hemphill, of San Diego, Cal., was so kind as to forward to me, for examination, all the North American